

EVALUATING MEMBER SATISFACTION WITH SERVICE QUALITY OF MICROFINANCE INSTITUTIONS

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ABSTRACT

This study employs a quantitative research approach to examine the effect of services quality on member satisfaction in category II MFIs. Primary data collected from 179 members of different credit union operating in Cameroon were used. The data were tested for normality and multivariate regression analysis was used. The result revealed that all the five hypotheses formulated to guide the study are attained. The effect of service quality tangibility, reliability, responsiveness, and empathy on members satisfaction of the MFIs were positive and significant while service quality assurance system has a positive but insignificant effect on member satisfaction. The category II microfinance institutions could ameliorate on the service quality as a strategy to enhance member satisfaction.

Key words: Member, satisfaction, SERVQUAL, microfinance.

INTRODUCTION

The success and progress that any service provider offers, be it financial or non – financial depends on the quality of their services rendered to their esteemed customers (Farooq et al, 2015). This is because the place of customers in any organisation is highly important as it determines their level of continues patronage of the products provided by the service providers (Ikhsan & Simarmata, 2021). The level at which different service providers relate to their customers in terms of service delivery, has attracted many researchers to look at the implications of service quality on customer satisfaction (Sharma & Srivasta, 2018). It has also attracted the interest of many clients to the degree that, most customers will not find it difficult to pay any amount of money or to transact with any institution where they received high service quality (Vivie, et al. 2020). Providing services of high quality shall enable the service provider to dominate the market and achieve a competitive advantage even if the services are very expensive (Fida et al, 2020). However, measuring such quality levels, is not something easy for an organisation to determine as customers are faced with different alternatives (Mosimanegape, et al. 2020).

Service industries, such as insurance companies, banks, micro-financial establishments, are required to offer outstanding services to their customers, in order to ensure that, they have a competitive edge in the market (Petkova, Sander & Brombacher, 2000). When compared with the price of maintaining current customers, the amount involved in attracting new customers to replace those customers lost by the bank, is far more expensive and difficult to recover (Slack & Singh, 2020). Service quality in the banking sector, therefore, distinguishes the level of performance between one bank and another bank (Siddiqi, 2011). According to Ejigu et al, (2016) service quality is vital as a requirement for profits and survival for most financial institutions.

Service quality allows micro-finance to focus on value-added procedures, allowing them to be more profitable and productive. The banking industry also faces difficulty in categorizing their customers as to whether they are service-oriented or price-oriented. Customers who are service responsive and willing to pay more for better service may tend to be drawn over time to industries that have a strong relative customer satisfaction position in the market (Clemes, 2008). Price-sensitive customers with a lower desire to pay for the quality of service can often gravitate with time to businesses with a relatively low quality/price marketplace (Clemes, 2008).

The expectations of customers in the Cameroonian banking sector after restructuring are very high. Most Cameroonian banks, especially micro-finance institutions are still below these expectations in recent times. Members still face issues such as delayed transaction notice, stock-outs, unprofessional or rude behaviours by bank employees, poor record quality or incorrect details, and non-availability of workers at service points, amongst other factors. Uwabor et al, (2020) expressed the opinion that poor customer service may affect loyal customers. The objective of marketing for many businesses is the establishment of long-term customer value-added ties. To ensure sustainable and favourable financial results in the long-term, businesses must first recognize the essential function of customer loyalty, rather than acquiring new customers on their own (Ali, 2020)

Almost every micro-financial establishment and bank in Cameroon faces a similar challenge, in meeting the quality of customers' expectations and ensuring customer loyalty. For example, delays in transactions. The transfer of funds is still a problem for members and the general public even with the advent of ATM machines and other payment methods. In most cases, members do not obtain a notice that his or her account is automatically credited or debited even when a transaction has not been made (Sakhaei, Afshari, Esmaili, 2014). As a result of the intensified competition in the industry, micro-financial establishments operating in Cameroon are under a great deal of stress. To ensure that their members are retained, a variety of techniques are advised, with the most important which is to improve on service quality. Service quality is especially important in banking because, it ensures high levels of member satisfaction, in a highly competitive market (Obananya, 2020).

Considering the devastating impact of poor member service on member satisfaction in micro-financial establishment as noted in Lin, (2017), Afhanorhan, et al. (2019) and Bhatt, (2020), one is motivated to investigate on the effects of service quality on member satisfaction in selected micro-financial establishments in the Douala. Specifically, to:

- Investigate role of service quality tangibility on member satisfaction.
- Verify the effect of service quality reliability on member satisfaction.
- Determine how, service quality responsiveness correlates with member satisfaction.
- Assess the effect of service quality assurance on member satisfaction.
- Evaluate the influence of service quality empathy on member satisfaction.

Haven gone through the introduction in section one, Section two presents a review of the theoretical and empirical literature. Section three describes the variables, data sources,

methodology procedure while the fourth section presents the findings then section 5 concludes the paper and proposes recommendations.

2. LITERATURE REVIEW

2.1 THEORITICAL LITERATURE

The SERVQUAL Model

The SERVQUAL instrument, when applied over time, can help in understanding both customer expectation, perceptions of specific services, and areas of needed quality improvements. Proper development of items used in the SERVQUAL instrument provide rich item-level information that leads to practical implications for a service manager. Though SERVQUAL scores are highly reliable, however, when used in different industries, it may fail to produce a clear delineation of the five basic dimensions. For the purpose of measuring member satisfaction with respect to different aspects of service quality and to overcome problems which are created as a result of the gap between management and members, a survey instrument was develop by (Parasuraman, Zeithmal and berry in 1988). The instrument is called SERVQUAL. The basic assumption of the measurement was that customers can evaluate a firm's service quality by comparing their perception with their experience. It is designed to measure service quality as perceived by the members. Though, the SERVQUAL model has been the major generic model used to measure and manage service quality across different service settings and various cultural background, it has been subjected to a number of theoretical and operational criticisms (Buttle, 1996).

This model was developed with the main objective of establishing shortfalls in service provision.in this technique, customers get to evaluate and asses the quality of service offered within a certain industry by comparing their service expectations with the actual service. Typically, the SERVQUAL model attempts to measure customer demands and individual perceptions (Danish, 2018). Here Q (quality gap) is derived through the subtraction of E (expectation) from P (the perception value). This factor leads to equation $Q=P-E$. A combination of all Q values helps determine the service rating amongst various customers (Hapsari et al., 2017). This factor serves an indication of how the service quality dimensions are influenced by customer perception. The SERVQUAL model is considered standardised because it can be applied within a broad spectrum of industries, including the banking industry.

The Hierarchical Model

The model was developed by Brady and Cronin in 2001, taking into consideration strong literature support and combining several models of measuring service quality. The hierarchical model is generic and applicable for a variety of service businesses. By adopting a multilevel and multidimensional approach, the model enables managers to recognize problems in the primary stage of service provided and finding customers' needs and weaknesses of the service to enhance customers' perceptions of service quality through offering a high quality of services. The model is considered highly suitable and applicable for service quality measurement. However, its

shortcomings is in its generic nature because it requires modifications and consideration of different factors for some to meet certain specific services industries and businesses.

Models Used in Specific Service Settings

Various researchers have approved a couple of measurement techniques used to evaluate service quality. Tabaku, and Cerri (2016) approved the LODGSERV model as the most accurate for evaluating service quality within the lodging industry. This model entails the application of the five SERVQUAL dimensions and comprises twenty-six items. On the other hand, Khan et al. (2017) used the LODGEQUAL model to evaluate the hotel industry's service quality. Here, the three dimensions were applied, including reliability, tangibles and empathy. In 2018, Lee & Madanoglu used the DINESERV model to assess the quality of services in restaurants. This model consists of twenty-nine items alongside the five SERVQUAL dimensions. Additionally, Rita et al. (2019) utilised the DIVEPERF model to measure customer perception regarding diving services. In addition, to the SERVQUAL dimensions, this model consists of twenty-seven items. All the models mentioned above entail modifying the SERVQUAL technique and attempting to improve its functionality. According to Mill (2002), two theories best explain member satisfaction. They are the disconfirmation paradigm, expectancy-value theory and Assimilation theory.

Disconfirmation Paradigm

Disconfirmation hypothesis shows that members contrast another help insight and a standard they have created. Their conviction about the help is controlled by how well it compares this norm. Under the disconfirmation worldview, clients make buys dependent on their assumptions, perspective, and aims. Afterward, during or after utilisation, view of execution happens as members assess the experience. The cycle is finished when members contrast the real help execution and their pre-experience standard or assumption. The outcome is affirmation, fulfilment, or disappointment. There are for parts of this worldview: assumptions, seen execution, disconfirmation, and fulfilment. The degree of assumptions addresses pre-utilisation assumption. Execution alludes to the member's impression of administration.

Disconfirmation results in case there is a disparity among assumptions and execution. At long last, fulfilment is dictated by joining the fulfilment results for the different traits of the assistance.

Expectancy-value theory

The expectancy-value theory was first developed by John William Atkinson and later expanded by Jacquelynne Eccles and her associates. The theory assumes that customers often make some judgement about a product, its benefits, and the likely outcomes of using the product. People will learn to perform the behaviour that their expectation will lead to a positive outcome. Their overall attitude is a function of beliefs about an object's attributes and the strength of these beliefs. The relationship has been summarised as follows:

$$Q = I_i (P_i - E_i)$$

Where: Q is the overall quality, Ii represents service attribute, P represents the perception, E represents the expectation.

2.2. EMPIRICAL LITERATURE

Minh and Huu (2016) developed and empirically tested the interrelationships between service quality, customer satisfaction and customer loyalty in the retail banking context. In this study, a research model about the interrelationships between services quality, customer satisfaction and customer loyalty were developed. Then a survey was conducted with retail banking customers about these constructs, which results in 251 valid respondents. The hypothesis was then proposed and tested using Confirmatory Factor Analyses (CFA) and the Structural Equation Modelling technique (SME). The analyses revealed that service quality and customer satisfaction are important and antecedents of customer loyalty and customer satisfaction mediates the effect of service quality on customer loyalty. These findings suggested that, they are non-linear relationships between 3 constructs and emphasize the need to treat customer loyalty management as a process which included plenty of factors interacting with each other.

Prabha, Jitendra and Pardeshi (2017) examined the level of customer satisfaction in the commercial banks. Descriptive analytical research designs were used for the study. Primary data were collected through the questionnaires using judgemental sampling from the commercial banks of Nepal.

Questionnaires were developed in 5 scales and mean; standard deviation and coefficient of variation have been used as tools. Cronbach's Alpha test was done to test the reliability of the data. It was found that the overall performances of all banks in terms of customer satisfaction have been satisfactory. Compared to government owned commercial banks performance of private banks have been satisfactory. Amongst different government banks, the performance of RBB has been better than NBL and ADB.

Darmula and Rao (2018) studied the service quality of public sector banks in Warangal district. The objectives of the study were to determine the perception of customer regarding the quality of service delivered by public sector banks. To determine the relevant dimensions of service quality for the banking sector, to identify the dimension of SERVQUAL that ensure maximum satisfaction for customers in banking sector, to analyse and compare the service quality perceptions of the customers in public sector banks and to study customer's perception and their expectations level provided by public sector banks. The study was based on primary data. State bank of India, Anhra bank and Canara banks were selected in which 10 branches from two banks and 6 branches for one bank were selected by convenience sampling technique. It was found from the study that 49% of the respondents were dissatisfied from the services and majority 51% were satisfied from the services offered by the banks.

The dissatisfied customers found responsiveness and empathy dimension as the twin concept that was lacked by the banks. It was suggested in the study that banks should generate a strong confidence among the customers that its primary objective can be achieved through the provision of a good service quality level accurately and timely with a strong performance.

Aremu and Aremu (2018) investigated how enhancing the service quality dimension stands as a means of sustaining customer satisfaction in the Nigerian banking sector. The study makes use of two hundred and fifty (250) respondents that are customers of the banks. The respondents were selected using purposive sampling techniques. The selected banks used for the study were First Bank, United Bank for Africa, Zenith Bank, GTBank, and Skye Bank. The study made use of a well-developed questionnaire to collect information gathered were analysing using multiple regression. Three segmental quality measures were employed that include tangibility, reliability, and responsiveness. Their findings revealed that there is a strong relationship between enhancing the banking sector service quality and the sustainability and positively correlation on the satisfaction of the customers.

Hassan, Anmer, and Ahsanullah (2019) investigated the impact of service quality on customer satisfaction using a comparative study on the Pakistan banking sector. A total of five hundred (500) customers of twenty-seven commercial banks include the private sector, public sector, and Islamic banks. Their study makes use of the Weighted SERVQUAL model. Five measures were used to measure service quality which included tangibles, reliability, responsiveness, assurance, and empathy. Their findings revealed that the five dimensions of service quality impacted positively and significantly customer satisfaction. Also, out of the three areas used, the private sector conventional bank followed by Islamic banks both in the public and private sector. However, the low-performance banking service in their findings falls within the conventional banks of the public sector.

Lomendra et al, (2019) assess the impact of the service quality dimension on the satisfaction of customers in the commercial banks in Mauritius. A total of 200 respondents that were customers of the commercial banks were randomly selected from the total customers using random sampling. Their study makes use of the SERVQUAL model. In analysing the data collected from the well-structured questionnaire administered to the respondents, they employed regression analysis techniques. Their findings revealed that all the five dimensions used in measuring service quality have a positive and significant influence on the satisfaction of the customer in the banking sector. The study however does not examine the effect of the service quality measures on the loyalty of the customer.

In Nigeria, Obananya (2020) examined the linkage between service quality and customer satisfaction in the commercial banking industry. Four dimension of service quality were used that include assurance, responsiveness, tangibility, and reliability. The study makes use of five selected banks across the Southeast region that includes: Union bank of Nigeria Plc in Enugu State, Fidelity bank in Ebonyi State, First bank of Nigeria in Abia State, Guarantee Trust Bank in Imo State, and Zenith Bank in Anambra state. A total of 1800 respondents were selected from the five banks in the different states using stratified random sampling technique. Simple percentage and multiple regression analyses were employed in analysing the data collected from the response of the respondents from questionnaire administered. The findings revealed that there is a significant correlation between service quality and customer loyalty in the Nigerian banking sector. Also based on the regression result, the study concluded that service quality in terms of tangibility,

assurance, reliability, and empathy has a strong significant impact on the satisfaction of the customers.

Paulo et al, (2020) examined the impact of e-service quality on the satisfaction of customers. Three dimensions of service quality in terms of e-service were used that included, word of mouth, site revisit, customer's trust and intention to repurchase. Online survey methods were used to sample a total of 355 customers that are online buyers with the organisation. They concluded that fulfilment, design of the website, and privacy or security of the business impacted positive and significantly on the satisfaction of the customer. Also, that service quality helps in improving the productivity of the organisation and significantly improves the behaviour of the customer to a positive part in terms of the likeness to the organisation.

In Kigali, Nshimiyimana (2020) investigated the mediating effects of customer satisfaction using the relationship that exists between ATM service quality and the loyalty of the customer. A total of 254 respondents were used and selected through convenience random sampling techniques. Well, returned questionnaires were used to collect data from the respondent. Regression analysis was used to achieve the specific objectives of the study. His findings revealed that a significant relationship exists between service delivery of the bank and the satisfaction of customers which in the case of the relationship between service quality and customer loyalty, there exists an insignificant relationship.

Ikhsan and Simarmata (2021) addressed the implication of service quality on the outcome of the customer using the service industry. Data was sourced through online survey techniques through Google forms with the use of social media platforms such as Facebook, Instagram, and LinkedIn. A total of 400 respondents were used. Two estimation techniques that involve, structural equation modelling and Chi-square were used. They found that service quality has a significant connection with the loyalty, satisfaction, and behavioural intention of the customer either directly or indirectly based on the reputation of the country. More so, that customer satisfaction, the reputation of the company based on the customer are major factors that determine the quality of service in an organisation and these factors also contribute to the behavioural intention of the customer and their loyalty to the organisation.

3. METHODOLOGY OF THE STUDY

Scope and Area of the study.

In this study an inductive qualitative method is adopted, this method is applied in a way that respondents were interviewed with open ended questions. Data were collected 179 derived by applying the unknown population formula of Cochran (1977) given as S=

$$\frac{Z^2 pq}{(E)^2} = \frac{1.96(0.5)(0.5)}{(0.08)^2} = 150.0625 = \text{minimum of 150 individuals.}$$

The sample size for this study therefore comprises a total of 200 respondents. 50 members were selected from BuPCCUL LTD, 50 members were selected from 1st TRUST, 50 members were selected from SOFINA S.A, and 50 members were selected from ADVANCE LTD. The number

of respondents was based on the number of active members in these establishments and those willing to participate in the study.

Model Specification.

In order to achieve our set objectives, the equation of multiple regressions was generally built around two sets of variables. The dependent variable (member satisfaction) and the independent variables (tangibility, reliability, responsiveness, assurance, empathy).

The basic objective of using regression equation is to make the researcher more effective at describing, understanding, predicting and controlling the stated variables.

The functional form of the multiple regression model is as follows;

$$MS = \beta_0 + \beta_1TAN + \beta_2REL + \beta_3RES + \beta_4ASS + \beta_5EMP + \beta_6GEN + \beta_7NOM + \beta_8NOA + \varepsilon_t.$$

Where:

MS = Member Satisfaction

TAN = service quality Tangibility

REL = service quality Reliability

RES = service quality Responsiveness

ASS = service quality Assurance

EMP = service quality Empathy

GEN= gender of member

NOM= Number of MFIs the member belongs

NOA= nature of activity of the member

β_0 = Intercept term.

β_{1-5} = Sensitivity of service quality to member satisfaction

Hence, $\beta_1 > 0$, $\beta_2 > 0$, $\beta_3 > 0$, $\beta_4 > 0$, and $\beta_5 > 0$ is expected. This means that all the service quality components should have a positive relationship with member satisfaction in selected micro-finance.

Estimation framework

The framework used to estimate the effects of service quality on member satisfaction in selected micro-finance is the SERVQUAL model. The SERVQUAL model focuses on five dimensions of service quality that can impact member satisfaction:

Reliability. Relates to the ability to perform the promised service dependably and accurately.

Responsiveness. Relates to the willingness to help members and provide prompt service.

Assurance.

Relates to knowledge and courtesy of employees and their ability to convey trust and confidence.

Empathy. Consist of providing caring, individualized attention to members. Tangibles. Explains the appearance of physical facilities, equipment, personnel and communication materials.

The t-test was used to assess the statistical significance of the various independent variables of the regression equations. Then, F-test was employed to determine the strength of the whole regression.

Adequacy of the model testing is measured using the coefficient of determination (R^2) and the adjusted R^2 . It assist in determining the extent to which all the independent variables put together explained variations on dependent variable which is member satisfaction. That is the variation in the independent variables explained by the variations in the dependent variables. Analysis was done using SPSS 20.00.

To test for the strength of the model the researcher conducted an Analysis of Variance (ANOVA) from where the researcher verified the significance value. The test like t-test of student was conducted at 95% confidence level and 5% significant level. In case the calculated value is greater than the critical value, then the conclusion is that the model is significant in explaining the relationship.

For descriptive statistics, the Mean($\bar{X}$), the standard deviation and range is most often employed to that effect. According to Agresti (2009), Mean ($\bar{X}$) is the average value calculated by adding up the values of each case for a variable and dividing by the total number of cases. $\bar{X} = \frac{1}{n} \sum_{i=1}^n nixi$ Where: $\bar{X}$ = mean; n = number total of respondents; Xi = scale value of respondent. For the interpretation of means values, especially for Linkert scale data as used in the ongoing study, Agresti (2009) suggests the following evaluation bands, mean value leow 3.5 is weak and insignificant in capturing the variable while means above 3.5 is said to be strong. Standard deviation is a value which indicates the degree of variability of data from the mean. It is computed by taking the square root of the variance (S)= $\sqrt{S^2}$ where: $S^2 = \frac{1}{n-1} \sum_{i=1}^n ni(xi - \bar{X})^2$. For interpretation, Agresti (2009), equally proposes that value less than 0.5 signifies the values are homogeneous and for Standard Deviation Level spreading greater than 0.5 implies that the variables are heterogeneous.

3. RESULTS AND DISCUSSION

A total number of 200 questionnaires were self-administered and a total of 182 were successful retained for the analysis out of which 03 were incomplete. Therefore, a total of 179 questionnaires were analyzed with response rate of over 89,5% which according to Colin (2005) responds rate of questionnaire survey above 80% provides reliable evidence for valid analysis.

Respondents' Profile (Socio-demographic characteristics of Respondents)

The demographic elements taken into account in the study included their gender, age, level of education, nationality and marital status. The distribution of the respondents according to each of these elements is summarized below;

Age Distribution of the Respondents

The below table shows the age distribution of the respondents who participated in the study

Table 1: Age Distribution of the Respondents

Modalities	Frequency	Percent	Cumulative Percent
Less than 30 years	79	44.1	44.1
31-40 years	49	27.4	71.5
41-50 years	17	9.5	81.0
51-60 years	15	8.4	89.4
>60 years	19	10.6	100.0
Total	179	100.0	

Source: Computed by author using field data (2026)

Table 1 presents the Age summary statistics of sampled respondents. Concerning the age group, majority of our respondents came from age group less than 30 years (44.1%), followed by those between 31-40 years (27.4%), Members above 60 years accounting for 10.6% then the age bracket of 41-50 years constituting 9.5% and lastly are members between 51-60 years (10.6%).

Gender Distribution of Respondents

Table 2: Gender of Member

Modalities	Frequency	Percent	Cumulative Percent
Female	96	53.6	53.6
Male	83	46.4	100.0
Total	179	100.0	

Source: Computed by author using field data (2026)

From the table 2, we can observe that our sampled included male and female members selected in each Category II MFIs in Douala to ensure gender consideration. We observe that 96 members (53.6%) of our sample were male and 83 (46.47%) were female.

Distribution of Member's experience at the credit union

Table 3: Member's experience at the credit union

Modalities	Frequency	Percent	Cumulative Percent
< 1year	20	11.2	11.2
1- 5 years	62	34.6	45.8
5-10 years	53	29.6	75.4
>10 years	44	24.6	100
Total	179	100.0	

Source: Computed by author using field results (2026)

Table 3 shows the experience of members measured in terms of how long a respondent has been a member of the credit union. The sampled data revealed that greater preponderance of respondents have been members just for 1-5 years accounting for 34.6%, follow by members with 5-10years

experience, more than 10 years and lastly by those with less than 1-year experience. It is obvious that this experience greatly influences customer experience and has to be incorporated in the model as one of the controlled variables.

Distribution of Respondent by Level of Education

Table 4: Academic qualification of Member

Modalities	Frequency	Percent	Cumulative Percent
Below AL	30	16.8	16.8
AL	14	7.8	24.6
HND	70	39.1	63.7
Bachelor degree	43	24.0	87.7
Post Graduate degree	22	12.3	100.0
Total	179	100.0	

Source: Computed by author using field results (2026)

With respect to academic qualifications, looking at the level of education of the respondents we observed that majority acquired Professional Diploma-HND (39.1%), followed by those with Bachelor degree (24.0%). Adding to this, members with FSLC, OL or non were 30 (16.8%), and those with Post graduate degree such as Master degree were 22 (12.3%). We observed that those with AL were 14 had the least percentage of (7.8%). This shows that most of the respondents are graduates indicating the members are relatively educated to have filled the questionnaire properly in regard to service quality and their relative satisfaction with the credit union and they can offer veritable facts on issues of interest in this study

Distribution of Respondent by Nature of member's activity

Table 5: Nature of member's activity

Modalities	Frequency	Percent	Cumulative Percent
Self employed	56	31.3	31.3
Private sector employee	79	44.1	75.4
Public sector employee	39	21.8	97.2
others	5	2.8	100.0
Total	179	100.0	

Source: Computed by author using field results (2026)

From the table 5, we can observe that our sampled included employees in the public sector and the private sector and the self-employed and others who did not disclosed their type of jobs for personal reasons. Majority of the members sampled are employee in the private sector (79, 44.1%) followed by the self-employed who were 56 out of the 179 sampled (31.3%). Civil servants

account for barely 21 % and majority of them were noticed to belong to more than one financial institution.

Distribution of Respondent by number of MFIs belonging to

Table 6: Number of MFIs belonging to by the member

Modalities	Frequency	Percent	Cumulative Percent
More	68	38.0	38.0
One	111	62.0	100.0
Total	179	100.0	

Source: Computed by author using field results (2026)

Table 6, indicates that majority of the sampled members selected in each Category II MFIs in Douala belong only to a single Credit Union (62.0) meanwhile the remaining 68 members (38%) are members to more than one credit unions.

Reliability Test Results (alpha)

In order to verify the hypotheses, the section begins with a cronbach alpha for reliability of items used in the construction of the variables as the first **pre-test** presented in Table 4.15.

Table 7: results of Cronbach's Alpha Reliability test

Cronbach's Alpha		N of Items		
0.774		6		
Variables	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
SQTAN	20.1556	3.740	.000	.906
SQREL	21.4667	1.781	.798	.755
SQRES	19.6889	3.397	.606	.869
SQASS	20.4222	1.752	.804	.754
SQEMP	20.0222	1.879	.965	.688
MBSAT	20.0222	3.740	.000	.906

Source: Computed by author using field data (2026)

The reliability if the research instrument was tested using the Cronbach alpha as seen on table 7. A larger number of items can result in a larger α , and a smaller number of items in a smaller α . A low value for alpha may mean that there are not enough questions on the test. It is observed from the above result that all the coefficients of Cronbach alpha fall above the benchmark of 0.7 thus indicating the research instrument is reliable and therefore we can conclude that there is some level of internal consistency with all the instruments used in this study.

Summary Statistics of key variables

The summary statistics of the key variables used in the study are presented in Table 8. It is worth mentioning that the variables in the table are indices that were created using the multiple correspondent analyses (MCA). The indices were not normalized since the range is just from 0 to 5. The descriptive statistics for the indices constructed from a set of the 5-point likert scale questionnaires measuring the extent of agreement of the respondents with respect to the service quality (independent variables) and member satisfaction (dependents) as well as a set of dummies generated from gender, education levels and nature of the member's activity of which some were used as control variables are as summarized in table 8.

Table 8: Descriptive Statistics of key variables

	Variables	N	Minimum	Maximum	Mean	Std. Deviation
Targeted Variables (Indices)	SQTAN	179	2.60	5.00	4.1263	0.66530
	SQREL	179	2.10	5.00	3.2570	0.77717
	SQRES	179	3.40	5.00	4.6047	0.23522
	SQASS	179	3.20	5.00	4.1799	0.40839
	SQEMP	179	2.10	5.00	4.0503	1.01823
	MBSAT	179	3.10	5.00	4.3128	0.56991
Gender	Male	179	0.00	1.00	0.4581	0.49964
	Female	179	0.00	1.00	0.5419	0.49964
Member To:	One	179	0.00	1.00	0.3799	0.48672
	More	179	0.00	1.00	0.6201	0.48672
Nature Of Activity	Private_sector_employee	179	0.00	1.00	0.3073	0.46265
	Public sector employee	179	0.00	1.00	0.4749	0.50077
	Self_employed	179	0.00	1.00	0.2179	0.41396

Source: Computed by author using SPSS and STATA from field data (2026)

The table 9 above shows the summary of the descriptive statistics for the variables included in our model. It is observed from the table that the mean value of member satisfaction is 4.3128 with a standard deviation of 0.56991, while the minimum and maximum values are 3.10 and 5 respectively. The result shows that there is a moderate deviation of customer satisfaction from the mean as the standard deviation is not far from the mean and also, the mean is closer to the maximum value than to the minimum thus indicating that members satisfaction was relatively high during the period under study.

Furthermore, the mean value for service quality tangibility (SQTAN) stands at 5.1263 with a standard deviation of 0.6653, while the minimum and maximum values are 2.6 and 5 and this indicates a moderate deviation of tangibility from the mean. The mean value of SQREL stands at 3.2570 with a standard deviation of 0.224682. The minimum and maximum values are 2.10 and 5.00, respectively for SQREL.

This indicates a low deviation of service quality reliability from the mean indicating some level of stability of the variable. The mean value of Service quality responsiveness stands at 4.6047 with a standard deviation of 0.23522 and a minimum and maximum value of 3.40 and 5.00, respectively. This indicates a moderate deviation of Service quality responsiveness from the mean indicating some level of stability of the variable. The mean value for service quality assurance (SQASS) stands at 4.1799 with a standard deviation of 0.40839, while the minimum and maximum values are 3.20 and 5 and this indicates a moderately low deviation of Assurance from the mean. Finally, the mean value of service quality empathy was found to be 4.0503 with a standard deviation of 1.01823. Point of sales has a minimum and maximum values of 2.10 and 5.00 which indicates high deviation from the mean and low level of stability in the variable.

Test for Normality

Use is made of Kolmogorov-Smirnov test since the observation is more 100.

Table 9: results of Kolmogorov-Smirnov Normality test

	Statistic	df	Sig.
SQTAN	0.265	179	0.124
SQREL	0.190	179	0.211
SQRES	0.285	179	0.098
SQASS	0.172	179	0.107
SQEMP	0.244	179	0.201
MBSAT	0.313	179	0.089

Lilliefors Significance Correction

Source: Computed by author using field data (2026)

Results of normality test presented in table 4.16 indicates that all the variables are not normally distributed since the probability of Kolmogorov-Smirnov test are all less than 0.05 thereby violating the normality test assumption of OLS.

Test for Multicollinearity/Correlation Results

Table 10: Correlation Results for the Test for Multicollinearity

Variables	SQASS	SQTAN	SQRES	SQREL	SQEMP
SQASS	1.000				
SQTAN	.041	1.000			
SQRES	-.243	.109	1.000		
SQREL	-.191	-.097	.255	1.000	
SQEMP	-.037	-.796	-.052	-.205	1.000

Source: Computed by author using field data (2026)

Table 10 represents the pairwise correlation matrix which shows the correlation which exists among the variables included in our model. The correlation coefficients of the leading diagonals stand at 1.00 which indicates that each variable is perfectly collinear to itself. Correlation can be positive or negative. Positive correlation occurs when the coefficient is positive. Positive coefficient implies an increase in one variable is associated with an increase in the other variable, while a negative correlation shows that an increase in one variable is associated with a decrease in another variable.

From the table, the results show a weak correlation among the independent variables indicating no evidence of multicollinearity. A strong correlation (coefficient of more than 0.8) will show possibility of multicollinearity. From the results there is. This will be further validated with the Variance Inflation Factor (VIF) presented in Table 4.19.

Table: 11: Results of VIF test of multicollinearity

	Tolerance	VIF
(Constant)		
SQTAN	.276	3.628
SQREL	.660	1.516
SQRES	.835	1.198
SQASS	.915	1.093
SQEMP	.271	3.685
Gender		
Male	.930	1.075
Member		
One MFI	.923	1.083
Nature of activity		
Self-employed	.898	1.113
Mean	0.7135	1.7989

Source: Computed by author using field data (2026)

The result in table 11 show the test for multicollinearity and the mean variance inflation factor stands at 0.7135 which is below the benchmark of 2.5. Thus, indicating the absence of multicollinearity in our model therefore indicating that our results are reliable.

1.0.1 Regression Results

Effect of member service quality and member satisfaction

The adequacy of the members' satisfaction model is verified using the Adjusted R-squared which is the coefficient of determination indicating the variation in the dependent variable due to changes in the independent variables adjusting for the inclusion of additional variables in the estimation. From table 4.20, the adjusted R^2 shows the degree of variation in members' Satisfaction that can be explained by variations in MFIs service quality. Inferring from the adjusted R^2 (Coefficient of multiple determination), 75.9% of variations in the members' Satisfaction is accounted for or explained by variations in service quality of the MFIs. However, 24.1% of variations in member

Satisfaction are accounted for by variations in other variables different from service quality (influence of the extraneous variables). This is known as the coefficient of non – determination.

The Fisher's F test is used to determine the risk of rejecting the null hypothesis when it is true. Given the fact that the probability corresponding to the F value is 0.0001, it means that we would be taking a 0.01% risk in assuming that the null hypothesis (service quality of MFI does not have a significant effect on members' satisfaction) is wrong. Therefore, we can conclude with confidence that the eight variables (tangibility, reliability, responsiveness, assurance, empathy, gender, number of MFI, and nature of employers activity) do bring a significant amount of information in predicting the member Satisfaction in category II MFIs in Douala, Cameroon. The alternative hypothesis of the study is therefore retained which states that services quality has a significant effect on members' satisfaction.

The regression results are presented in Table 4.20. The coefficient, standard deviation, beta coefficient, t-statistics, P-values and confidence interval are presented in the respectively columns.

Table 12: Linear regression Results for model member satisfaction of Category II MFI

Dependent Variable	Coefficient	Standard Error	T	P> t
SQTAN	0.556***	0.054	10.314	0.00
SQREL	0.076**	0.030	2.559	0.011
SQRES	0.472***	0.088	5.384	0.000
SQASS	0.063	0.048	1.313	0.191
SQEMP	0.145***	0.036	4.088	0.000
Gender (Male)	0.013	0.039	0.325	0.745
Number of MFI (One)	0.014	0.040	0.345	0.731
Nature of activilty (self-E)	-0.021	0.048	-0.430	0.667
_cons	-0.734	0.459	-1.600	0.112
	Below AL	30	16.8	16.8
R-squared		0.767		
Adjusted R-squared		0.759		
F(5 , 78)		96.362		
Prob > F		0.001		

Source: Computed by Author using Field Data

Note: ***=1% and *=10% level of statistical significance

Source: Computed by author using field data (2026)

The intercept (constant term) is the expected mean value of Member satisfaction when all independent variables are set to zero. Everything else constant, MFIs in the town of Douala will make a negative member Satisfaction in the absence of service quality. Furthermore, MFIs in Douala will make a no significant member Satisfaction when service quality tangibility, reliability, responsiveness, assurance, empathy, gender, number of MFI, and nature of employers activity are held constant, as given by the insignificance of the t - statistic of 0.112% which is more than the level of significance of 0.05.

Service quality tangibility has a positive coefficient. This implies that an increase in service quality tangibility (SQTAN) is associated with an increase in member's satisfaction. An increase in SQTAN by one point will result to an increase in member Satisfaction by 0.556 point. Inferring from the significance of the t statistic of 10.3, it implies that we will be taking a 0.00% risk in assuming that the service quality tangibility have a statistically significant effect on the member Satisfaction at 1% level of significance. We therefore conclude that tangibility of service quality has a positive effect which is consistent with the a priori expectation and has important implications in influencing member Satisfaction.

Service quality reliability has a positive and significant effect on Member Satisfaction all other variables being constant. This implies that an increase in service quality reliability is associated with an increase in member's satisfaction. For each point increase in the service for Service quality reliability, Member Satisfaction increases by 0.076 point. Inferring from the significance of the t statistic of 2.559, we will be taking a 0.011% risk in assuming that Service quality reliability has a statically significant effect on Member Satisfaction at 5%. We therefore conclude that Service quality reliability service has an important positive effect on Member Satisfaction, which is consistent with the theoretical expectation.

Service quality responsiveness has a positive and significant effect on Member Satisfaction all other variables being constant. For each unit increase in the Service quality responsiveness, Member Satisfaction increases by 0.472 point. Inferring from the significance of the t statistic of 5.384, we will be taking a 0.00% risk in assuming that Service quality responsiveness has a significant effect on Member Satisfaction which is lower than the level of significance of 1%. We therefore conclude that Service quality responsiveness service quality has a positive and significant effect on the Member Satisfaction.

Service quality assurance has a positive but insignificant effect on Member Satisfaction all other variables being constant. For each unit increase in the Service quality empathy, Member Satisfaction increases by 0.063. Inferring from the significance of the t statistic of 1.313 we will be taking a 19.1% risk in assuming that the Service quality assurance have a significant effect on Member Satisfaction which is greater than the level of significance of 5%. We therefore conclude that Service quality assurance has a positive but insignificant effect on Member Satisfaction.

Service quality empathy has a positive and significant effect on Member Satisfaction all other variables being constant. For each unit increase in the Service quality empathy, Member Satisfaction increases by 0.145 point. Inferring from the significance of the t statistic of 4.088, we will be taking a 0.00% risk in assuming that Service quality empathy has a significant effect on Member Satisfaction which is lower than the level of significance of 1%. We therefore conclude that Service quality empathy has a positive and significant effect on the Member Satisfaction of MFs in Douala.

For the control variables, Gender and the number of MFI which members belong have positive but insignificant effect on member satisfaction we will be taking upto a 74.5% and 73.1% risk in assuming that the Gender and the number of MFI which members belong, respectively have a

significant effect on Member Satisfaction which is far lower than the level of significance of 5%. In the same light, nature of member activity has a negative and insignificant influence on members satisfaction. Therefore the three control variables have insignificant effect on member Satisfaction.

Tests for Heteroskedasticity

Table 13: Results of Glejser Tests for Heteroskedasticity

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	1.318	8	.165	8.473	.110 ^b
Residual	3.306	170	.019		
Total	4.624	178			

The F statistics for Glejser stands at 8.473 with probability value not less than 0.05 indicating that the absence of the problem of heteroscedasticity as the null hypothesis of heteroscedasticity is rejected.

2. CONCLUSION

Members are the most important stakeholders for category II MFIs and this study employed a quantitative research design to examine the effect of services quality on member satisfaction in category II MFIs. All the five hypotheses formulated to guide the study are attained. The effect of service quality tangibility, reliability, responsiveness, and empathy on members satisfaction were found positive and significant well as the influence of service quality assurance system has a positive but insignificant effect on member satisfaction. The results of the findings have shown that service quality of MFIs is an important instrument to use in promoting member satisfaction and hence, the recommendations are made:

- The category II microfinance institutions have to ensure Service Quality Tangibility to enhance member satisfaction by improving on pphysical facilities, equipment and appearance of personnel
- The category II microfinance institutions have to constantly provide reliable service quality to member as a strategy to enhance their satisfaction with the credit union by performing the promised service dependably and accurately
- More so, microfinance institutions should embark on service quality responsiveness by increasing wwillingness to help customers and provide prompt service to member
- Most importantly, category II microfinance institutions operating in Cameroon have to equally ameliorate on service quality empathy by increasingly ccatering, individualized attention.
- Microfinance institutions in Douala and Cameroon at large should inculcate the habit of enhancing service quality assurance too to make member more satisfied by enhancing Knowledge and courtesy of employees and their ability to inspire trust and confidence.

REFERENCES

- Afhanorhan, A., Awang, Z., Rashid, N., Foziah, H., & Ghazali, P. (2019). Assessing the effects of service quality on customer satisfaction. *Management science letters*, 9(1), pp 13-24.
- Afoz, N.N (2019). Effect of services quality on customer satisfaction. Evidence from banks in Tangail. *Management studies and economic systems* 4(2) pp 145-159.
- Agresti, A. (2009). *Statistical methods for the social sciences* (5th ed.). Pearson.
- Ali, O.M., (2020). The roles of relationship and service quality as drivers of customer loyalty: An empirical study. *Open journal of social services* 8(4) pp 1-19.
- Aremu, M.A., Onifade, T.E., Aremu, M.A., and Mustapha, Y.I (2018). Enhancing service quality dimensions as means of sustaining customer's satisfaction in Cameroonian banking industry. *Journal of sustainable development in Africa* 20 (1) pp 301-316.
- Beck, T. (2018). Finance, fintech and financial inclusion. Tilburg University, European Banking Center Discussion Paper.
- Bhatt, K. (2020). Measuring service fairness and its impacts on service quality and satisfaction. A study of Indian banking services. *Journal of financial services marketing* 25, pp 35-44.
- Brady, M. K., & Cronin, J. J., Jr. (2001). Some new thoughts on conceptualizing perceived service quality: A hierarchical approach. *Journal of Marketing*, 65(3), 34–49. <https://doi.org/10.1509/jmkg.65.3.34.18334>
- Buttle, F. (1996). SERVQUAL: Review, critique, research agenda. *European Journal of Marketing*, 30(1), 8–32
- Clemes, M. D., Gan, C. E. C., Kao, T. H., & Choong, M. (2008). An empirical analysis of customer satisfaction in international air travel. *Innovative Marketing*, 4(1), 49–62.
- Cochran, W. G. (1977). *Sampling techniques* (3rd ed.). John Wiley & Sons, Inc.
- Danish, R. Q., Humayon, A. A., Iqbal, H. J., Raza, S., & Shahid, J. (2018). The impact of service quality and service value on customer satisfaction through customer bonding: Evidence from the telecommunication sector. *European Online Journal of Natural and Social Sciences: Proceedings*, 7(1), 5346.
- Darmula, S., & Rao, N. H. (2018). Service quality in commercial banks: A study of public sector banks in Warangal district. *Journal of Management*, 5(4), 9–17.
- Ejigu, S. N., et al. (2016). E-banking service quality and its impact on customer satisfaction in state-owned banks in East Gojjam Zone, Ethiopia. *Global Journal of Management and Business Research: B (Economics and Commerce)*, 16(B8), 25–35.
- Fida, B.A., Ahmed, U., Al-Balushi, Y and Singh, D. (2020). Impact of service quality on customer loyalty and customer satisfaction in Islamic banks in the Sultanate of Oman. *SAGE Open*, pp 1-10.
- Hapsari, R., Clemes, M. D., & Dean, D. (2017). The impact of service quality, customer engagement and selected marketing constructs on airline passenger loyalty. *International Journal of Quality and Service Sciences*, 9(1), 21–40. <https://doi.org/10.1108/IJQSS-07-2016-0048>
- Hassan, R., Anmer, I. B., and Ahsanullah, A, (2019). Impact of service quality on customer satisfaction. A comparative study on banking sectors of Pakistan through Weighted SERVPERF Model. *International transaction journal of Engineering, management and Applied Services and Technologies*, pp 1-15.

- Ikhsan, R-B and Simarmata, J. (2021). SST- Service and customer outcome in service industry: mediating the role of corporate reputation, *Management science letters* 11, pp 561-576.
- Karim, R.A., (2019). Influence of service quality on customer satisfaction and customer loyalty in the private banking sector of Bangladesh: A PLS approach *journal of marketing and information system*, 2(2), pp 8-17.
- Khan, M., Smith, J., & Ali, R. (2017). Customer satisfaction in e-commerce: A comparative study. *International Journal of Marketing Studies*, 9(4), 12–24.
- Lee, K., & Madanoglu, M. (2018). The impact of service quality and customer satisfaction on consumer behavior in wineries. *The Service Industries Journal*.
<https://doi.org/10.1080/02642069.2018.1478411>
- Lin, C and Wang T (2017). A study on the effect of service quality on customer loyalty and corporate performance in financial industry, *problems and perspectives in management* 15 (2), pp 355-363.
- Lomendra, V., Sharmali, P., Roubina, TJ., Ganess, D., and Nabeeleh, M.Z.S. (2019). Assessing the impact of service quality dimensions in customer satisfaction in commercial banks of Mauritius studies in *Business and Economics* 14(1), pp 259-270.
- Mosimanegape, P., Jaiyeoba, O., Iwu, C.G. and Chekula-Mahama, C. (2020). Examining the relationship between service quality and customer satisfaction in the public service. The case of Botswana. *Wseas Transaction on Business and Economics*, 17(1), pp 579-593.
- Nshimiyimana, A. (2020). The mediating effects of customer satisfaction in the relationship between ATM service quality and customer loyalty. A case study from bank of Kyali. *European Journal OF Business and Management Research*, 5(4), pp 23-32.
- Obananya, C. G. (2020). Service quality and customers' loyalty in Nigerian commercial banking industry. *International Journal of Innovative Finance and Economics Research*, 8(4), 1–12.
- Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1988). SERVQUAL: A multiple-item scale for measuring consumer perceptions of service quality. *Journal of Retailing*, 64(1), 12–40.
- Paulo, A., LastName, B., & LastName, C. (2020). The impact of e-service quality on customer satisfaction: Evidence from online consumers. Unpublished
- Petkova, V. T., Sander, P. C., & Brombacher, A. C. (2000). The use of quality metrics in service centres. *International Journal of Production Economics*, 67, 27–36.
- Prabha, J., Jitendra S., & Pardeshi, R. (2017). Fingerprint based automatic human gender identification. *International Journal of Computer Applications*, 170(7), 1–4.
- Rita, P., Oliveira, T., & Farisa, A. (2019). The impact of e-service quality and customer satisfaction on customer behavior in online shopping. *Heliyon*, 5(10), e02690.
<https://doi.org/10.1016/j.heliyon.2019.e02690>
- Sakhaei, S. F., Afshari, A. J., & Esmaili, E. (2014). The impact of service quality on customer satisfaction in Internet banking. *Journal of Mathematics and Computer Science*, 9(1), 33–40.
<https://doi.org/10.22436/jmcs.09.01.04>
- Siddiqi, K. O. (2011). Interrelations between service quality attributes, customer satisfaction and customer loyalty in the retail banking sector in Bangladesh. *International Journal of Business and Management*, 6(3), 12–21.
- Tabaku, E., & Cerri, S. (2016). An assessment of service quality and customer satisfaction in the hotel sector. *Tourism and Hospitality Industry*, 36, 480–489.

- Tabaku, E., & Cerri, S. (2016). An assessment of service quality and customer satisfaction in the hotel sector. In *Tourism & Hospitality Industry 2016 Congress Proceedings* (pp. 480–489). University of Rijeka, Faculty of Tourism and Hospitality Management.
- Uwabor, O. L., & Ugwuonah, G. (2020). E-service quality and customer loyalty in deposit money banks in Nigeria. *European Journal of Business and Management*, 12(21), 104–112. <https://doi.org/10.7176/EJBM/12-21-04>
- Vivie, N.P., Rantyant, R.E. AND Halim, O. (2020). The influence of service innovation and service quality to customer satisfaction and loyalty in banking industry. *International Journal of Advanced Science and Technology* 29(12), pp 1541-1553.